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Application No.: 10/669,371  
Art Unit 2871Attorney Docket No. 0465-1880PUS1  
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## REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application. Claims 1-9 and 12-23 are pending in the present application. Claims 7-9, 17 and 18 are withdrawn. Claims 1-6, 10-16, 19-23 are rejected. By this reply, claims 1-3, 5-6, 12-14, 19 and 21 have been amended and claims 10 and 11 have been canceled. Claims 1, 12, 19 and 21 are independent claims. Therefore, claims 1-9 and 12-23 are currently pending. No new matter has been introduced by this Amendment. Amendment is based on Figs. 4-6 and paragraphs [0038]-[0051] of the specification. Reexamination and reconsideration of the pending claims is respectfully requested.

Regarding the Title of the Invention, Applicant has amended the Title of the Invention in order to better reflect the subject matter claimed.

In the Office Action, claim 2 is objected to because of the informalities. Claims 1, 5-6 and 10-16 are rejected under 35 USC 102(b) as being anticipated by **Kim et al.** (KR 10-1999-0024956, hereinafter "**Kim**"). Claims 21-22 are rejected under 35 USC 102(b) as being anticipated by **Kawaguchi** (US 6,052,171, hereinafter "**Kawaguchi**"). Claims 2-4 are rejected under 35 USC 103(a) as being unpatentable over **Kim** in view of **Moon et al.** (US 2002/0044246, hereinafter "**Moon**"). Claims 19-20 and 23 are rejected under 35 USC 103(a) as being unpatentable over **Kawaguchi** in view of Official Notice. The rejections of claims 1-6 and 12-23 are respectfully traversed and reconsideration is requested.

Regarding the Objection, "first and a second line-on glass signal pads" is amended to "first and second line-on glass signal pads" in claim 2 as to the indication of the Examiner. Therefore, this objection should be withdrawn.

Claim 1 is allowable over **Kim** and **Moon** in that claim 1, as amended, recites the feature, for example, "a plurality of line-on glass type signal lines connecting the first and second line-on glass signal pads in the corner of the outer area of the picture display part for applying gate power voltage signals and gate control signals to gate drive ICs in order to drive gate signal lines

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of the picture display part.”

None of the cited references including Kim and Moon, singly or in combination, does teach or suggest the feature of “a plurality of line-on glass type signal lines connecting the first and second line-on glass signal pads in the corner of the outer area of the picture display part for applying gate power voltage signals and gate control signals to gate drive ICs in order to drive gate signal lines of the picture display part,” recited in amended claim 1.

Kim discloses the data lines 620 and ground lines 700 between the data lines 620. However, as shown in Figs. 1 and 3, the data lines 620 and ground lines 700 are not located in a corner of the outer area of the picture display part. Further, Kim discloses a COG type. That is, Kim needs additional means formed out of the substrate 20 in order to connect gate IC 50 and Driving IC 40. Therefore, Kim does not disclose or anticipate at least the following feature of “a plurality of line-on glass type signal lines connecting the first and second line-on glass signal pads in the corner of the outer area of the picture display part for applying gate power voltage signals and gate control signals to gate drive ICs in order to drive gate signal lines of the picture display part.”

Moon discloses that second common voltage pads 143 are on the side of the panel 120. Therefore, Moon fails to teach or suggest the feature of “a plurality of line-on glass type signal lines connecting the first and second line-on glass signal pads in the corner of the outer area of the picture display part for applying gate power voltage signals and gate control signals to gate drive ICs in order to drive gate signal lines of the picture display part.”

As stated above, none of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicant respectfully submits that claim 1 and claims 2-6, which depend therefrom, are allowable over the cited references.

Similarly stated above, claim 12 is allowable over Kim in that claim 12, as amended, recites the feature, for example, “forming gate lines in a picture display part and a plurality of line-on glass signal lines in one corner of an outer area of the picture display part on a substrate for applying gate power voltage signals and gate control signals to gate drive ICs in order to drive gate signal lines of

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the picture display part.”

As stated above, none of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicant respectfully submits that claim 13 and claims 14-15, which depend therefrom, are allowable over the cited references.

Claim 19 is allowable over Kim, Moon and Kawaguchi in that claim 19, as amended, recites the feature, for example, “a plurality of line-on glass type signal lines located in one corner of an outer area of the picture display part of a lower substrate for applying drive signals to drive the liquid crystal cells, wherein the one corner of the outer area of the picture display part is corresponding to between the gate pad and the data pad.”

Kawaguchi discloses that the source lines 11, the opposite-voltage use line 12 and the connection lines 13, as shown in Figs 1A and 2. These lines 11, 12 and 13 are all formed on the side of the panel or substrate. These lines 11, 12 and 13 are not located in a corner of the outer area of the picture display part. Further, Kawaguchi discloses TCP type. Kawaguchi is silent about pad structure between gate pad and data pad. That is, Kawaguchi, does not disclose or anticipate at least the following feature of “a plurality of line-on glass type signal lines located in one corner of an outer area of the picture display part of a lower substrate for applying drive signals to drive the liquid crystal cells, wherein the one corner of the outer area of the picture display part is corresponding to between the gate pad and the data pad.”

Similarly stated above, the other cited references of Kim and Moon fail to teach or suggest this feature.

Therefore, none of the cited references including Kim, Moon and Kawaguchi, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicant respectfully submits that claim 19 and claim 20, which depends therefrom, are allowable over the cited references.

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Claim 21 is allowable over Kim, Moon and Kawaguchi in that claim 21, as amended, recites the feature, for example, "a plurality of line-on glass type signal lines located in one corner of an outer area of the picture display part of a lower substrate for applying drive signals to drive the liquid crystal cells."

As stated above, none of the cited references including Kawaguchi, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicant respectfully submits that claim 21 and claims 22-23, which depend therefrom, are allowable over the cited references.

Applicant believes the foregoing remarks establish that the application is in condition for allowance and early, favorable action is respectfully solicited.

### **Conclusion**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Jun S. Ha, Registration No. 58,508, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

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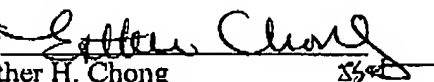
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: July 9, 2008

Respectfully submitted,

By   
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